EXHIBIT 17

CONFIDENTIAL

UNITED STATES DISTRICT COURT

DISTRICT OF MINNESOTA

- -

In Re:

Bair Hugger Forced Air Warming

Products Liability Litigation

Civil Action No. 16-cv-4187

(JNE/FLN)

This Document Relates To:

Gareis v 3M Co., et al

- -

DEPOSITION OF BRADLEY P. PRESNAL, M.D.

VOLUME I, PAGES 1 - 183

DECEMBER 4, 2017

(The following is the deposition of BRADLEY P. PRESNAL, M.D., taken pursuant to Notice of Taking Deposition, via videotape, at the offices of Palmetto Health-USC Orthopedic Center Convenient Care Building, 101 Business Park Boulevard, in the City of Columbia, State of South Carolina, commencing at approximately 6:05 o'clock p.m., December 4, 2017.)

Q. Okay. How are instruments sterilized?

A. I don't know if I can get into the technical part of it, but it basically is a high pressure, high temperature steam sterilizer.

Q. Okay. Do you consider the hospital is competent to sterilize instruments?

A. Yes.

Q. Do you have any reason to believe that the instruments in Mr. Gareis's case were contaminated and caused the infection?

A. Not -- Not that I remember. You know, the -- all the sterilized instruments have indicators that show whether they've reached the right temperature and pressure to show that they've gone through the cycle correctly, so that's always checked.

Q. Any reason to believe that the implant was contaminated?

A. No.

Q. Do you engage in skin antisepsis? I think you touched on that a moment ago.

A. Yeah. We probably started this in 2005, maybe earlier. We have patients do Hibiclens showers the night before and the morning of. So they take a shower with a special antibiotic soap the night before surgery, the morning they come in, and then we -- for

the surgery we use a skin prep which is typically either Dur -- a DuraPrep or ChloraPrep. Both are alcohol based with either chlorhexidine or iodine component.

Q. Is there anything done as far as prep of the skin goes before making your incision?

A. So that's the -- that's the DuraPrep or ChloraPrep's put on the skin.

Q. Uh-huh.

A. And then we use Ioban, which is a thin kind of plastic-type membrane that sticks to the skin that seals the drapes or helps keep the drapes in place.

Q. And do you cut through that when making your incision?

A. Yes.

Q. And what is that designed to do?

A. Well it -- it -- it's designed to cut on -- or to cut down on the amount of bacteria migration to the skin, to -- to the edge of the incision.

Q. Okay. When you make your incision do you use retractors to pull that away?

A. Yes.

Q. Let's talk about movement in and out of the operating room. Do you do anything to attempt to limit movement during these types of surgeries?

A. So we typically have signs on the outer door saying, you know, don't come in unless you have to come in. We limit any traffic that has to come in must come in through the sterile -- sterile corridor. We don't allow traffic to come in from the out -- outer design. If you look, the -- the OR's have an outer corridor and a inner sterile corridor so the traffic that does come into the room has to come through the sterile corridor.

Q. Okay. Do you recall, in Mr. Gareis's case, whether there was any unusual movement in and out of the operating room?

A. Not that I remember, no.

Q. When staff members do have to come in during the surgery, do they utilize the sterile door?

MR. GORDON: Object to the form of the question.

A. Yes. We tell them they have to come in that way, and we -- you know, certainly there may be rare cases where somebody doesn't know or comes in, but it's very unusual.

Q. Have any reason to believe that that protocol was not followed in this case?

A. No.

Q. Does the operating room theatre have a

ventilation system?

A. Yes.

Q. And was this the type of system that introduces clean air into the OR?

A. As far as I know when we -- when we looked at this, especially when I was involved with the renovations, we looked a lot at the airflow because it's important with joint replacement, so -- because we looked at possibly installing laminar flow, which is a little bit controversial as to whether it reduces infection. But basically what laminar flow is a unidirectional high exchange, so we found that what they had was still high exchange unidirectional flow which is basically laminar flow, it's just not the name for it.

Q. Okay. And why is it important to have unidirectional flow?

A. Because there have been studies that show that turbulent flow increases your risk of infection. So you want the airflow to be top down so that it's not pulling up things from the ground, so it's always pushing things down towards the floor.

Q. Is reducing particulates in the air something you care about as the orthopedic surgeon?

A. Sure.

Q. Let's talk a little bit about the -- the implant itself. What type of implant did you put in Mr. Gareis?

A. It was a -- a system from DePuy. The stem was a CORAIL stem. The typical implant that I use with that, the acetabular component is a PINNACLE. It had a polyethylene liner, Ultrex liner, and then he had a 40 millimeter metal head.

Q. Okay. So it was not a metal-on-metal system?

A. No.

Q. Is the implant sterile before you place it?

A. Yes.

Q. Okay. So when you place an implant for doing a total hip such as Mr. Gareis, how is it that you get the implant from the packaging into the patient?

A. So typically there is a two-stage packaging -- packaging for all sterile implants, there's an outer portion that the scrub nurse will open and hand it to the scrub tech, so they handle it from off side the -- out of the sterile field onto the sterile field. Then there's another package that the scrub nurse or scrub tech will open to expose the implant so that you can implant it.

Q. And then how do you physically get it out of the package into the -- into the patient?

A. So we try and use as little touch -- no touch when we can. Some things it's almost impossible to do that. So for the acetabular component there's a handle that is attached, usually screws into the socket part, and that is your impactor, you use the handle, again trying not to touch the component as much as we can, place that in and -- and basically hammer it into place. For the stem, same thing; there's a handle that either screws in or locks onto the stem part and it is hammered into the femur, or impacted.

Q. Okay. And did you do that in Mr. Gareis's case?

A. Yes.

Q. Are there any other infection control measures that we haven't talked about that you or the OR staff follows?

A. Well we do -- the antibiotics are, you know, twenty -- are before surgery. The timing of that's critical so we try and do that within 30 minutes to an hour of cut time. We keep people on prophylactic antibiotics in the hospital for 24 hours IV antibiotics. We use, you know, sterile dressings. At

that point we had switched from staples to doing -- Well let me make sure I'm telling you right because I'm not sure of the time we switched that. (Witness reviewing documents.) No, we did use staples in his case. We've gotten away from staples as well.

Sterile dressings. We tell them not to shower for the first -- when we're using staples, for the first three days. So those are our sort of standard measures.

Q. As you recall, was Mr. Gareis typically a compliant patient?

A. Yes.

Q. Do you have any reason whatsoever to believe that you or your staff failed to follow all the protocols that you just described?

A. No. I think, you know, at that point we're pretty regimented with how we approach hip and knee replacement so we were doing all the things that we knew to do back then.

Q. Okay. We're here because of a patient-warming device, want to talk to you a little bit about patient warming.

You understand it's become common practice to warm patients during surgery; --

A. Yes.

Q. -- right?

Do you know what it's intended to do?

A. I think the -- the basis is that they have shown -- there's some studies that show that keeping a patient warm decreases infection. From -- From my reading that is mainly in the general surgery realm. As far as I know, there's not a lot of published data in the orthopedic realm on that.

Q. Well you bring up a good point.

Do you know whether there's any solid evidence that supports the benefit of using patient warming during a total knee or total hip surgery?

A. Not -- Not that --

MR. GORDON: Object to the form of the question, also lack of foundation.

A. Not that I've read, no.

Q. Okay. Do you subscribe to any orthopedic journals?

A. Yes.

Q. Or any general medical journals?

A. Yes.

Q. Do you feel like you keep abreast of the latest developments regarding orthopedic surgery?

A. So I try to, and the other thing I typically do is I try and make it to the national meeting as

A. I wouldn't --

MR. HODGES: Objection, form.

A. -- say "infinite," but there are a lot of -- there are several different ways, again depending on which -- if you divide it into time frames. That's how I think of it. Intraoperative, perioperative, and again perioperative can be different depending on who is making that definition of the timeframe, or late infection, chronic infection which could be a hematogenous spread, some type of infection somewhere else in the body goes there. And that could be any type of infection, although the typical ones are going to be some type of septic episode where they've had an infection somewhere else but they get bacteria in the blood and it goes to the hip.

So I would consider all those -- they're different sources, but that's all one type of infection. Again there's lots of different sources it could come from, but it's sort of one way to get there, hematogenous spread through the blood.

Q. Now earlier, when Mr. Hodges was asking you questions, you said something about the hospital was evaluating airflow, or you were -- maybe it was your group.

A. Right. Right.

Q. What prompted that?

A. So when we were adding the new ORs, one of our discussions was, since we knew we were going to be doing a high percentage of joint replacements there, should we add laminar flow. So again it's a little bit controversial as to whether it actually decreases the risk; some people believe it does, some people don't. But what we found out through our research was laminar flow is almost a trademark. It is a unidirectional flow with a high exchange rate. So you can actually have the same thing as laminar flow, but not have to buy laminar flow, if that makes sense. It's kind of like buying Coke, or going and buying generic cola. You can get the same thing, but you're just not paying for the name.

So laminar flow, we found out, was really more of a brand. So what we wanted was a unidirectional flow so the air flows from the ceiling to the floor in one direction, doesn't go in multiple directions. So you have a air vent above the operative flow --

Q. I think they call it a plenum, does that sound?

A. It may be. I don't know. I can't get that technical. But this is what I learned in our evaluation, so.

But what you wanted was a certain level of full-room exchanges per minute or per hour, I can't remember what the parameter was. So unidirectional flow, a certain number of changes per minute or per hour. And that's what we wanted was to make sure that we were -- at least the airflow in the room was of the quality of a laminar flow. So we looked at the rooms that we currently used and the new rooms to make sure we were going to get that type of airflow in all of the rooms.

Q. And the -- the downward flow from the ceiling, where does it go out?

A. I can't know that I can answer that. So it goes straight down and you hope it goes away from the operative field. That's what you hope.

Q. Okay. You're not aware of the location of any vents on the --

A. I -- I assume there is, but I don't really know.

Q. You described a door leading to a -- the -- I think you described it as a sterile corridor.

A. Sterile core, yes.

Q. And when you used the words "the sterile core," the corridor itself is not sterilized; right?

MR. HODGES: Objection, form.

A. No. It's just more -- more barriers from the outside. So more doors to the -- between the operating room and the outside. So it's an extra door from the outside is what we're trying to use. And you can't go into that sterile core with your mask down. When I say you can't, you're instructed not to. If you're in the sterile core your mask has to be up. So in the outside areas around the OR you can walk around without a mask, but in this part of the OR, the sterile core, you can only go in with head cover, mask and everything. So it's kind of like an operating room, but you don't do any surgery in there.

Q. And to get from the OR to the doctor's lounge you go through the sterile core?

A. Sterile core, yes.

Q. Okay. So the procedure would be to wear head -- head covering and mask through that.

A. Yes.

Q. But once you get to the doctor's lounge you can take that off?

A. You can take the mask off.

Q. Take the mask off but not the head covering?

A. Typically once you're back there you're going to keep the head cover on. You put it on first